Hurricane PMV

The Ultimate in Style & Performance®

Pride Mobility Products Corp.

Exeter, PA
St. Catharines, ON

1-800-800-8586
www.pridemobility.com

SAFETY GUIDELINES

Read and follow all of the instructions in this manual before you attempt to operate your PMV for the first time. If you are unable to understand any of this information or require additional assistance for set-up, contact your local Pride Provider or call the Pride Tech Service Department at **1-800-800-8586**.

The following symbols are used throughout this Owner's Manual to identify warnings and cautions. It is very important for you to read and understand them completely.

WARNING! Failure to heed the warnings in this owner's manual may result in personal injury.

CAUTION! Failure to heed the cautions in this owner's manual may result in damage to your mobility vehicle.

Please be sure to fill out and return your warranty card. Also, notify us of any change of address so that we can keep you apprised of important information about safety, new products, and new options that can increase your ability to use and enjoy your PMV.

Your Hurricane:

Body Color _____ Serial # _____

Purchase Date _____ Options _____

Your authorized Pride Mobility Products Corporation provider:

Name_____

Address_____

Phone_____

C O N T E N T S

I. INTRODUCTION 5

II. SAFETY 6

III. EMI/RFI 9

IV. SPECIFICATIONS 11

V. DESCRIPTION 13

VI. BATTERIES AND CHARGING 16

VII. OPERATION 20

VIII. COMFORT ADJUSTMENTS 22

IX. DISASSEMBLY AND ASSEMBLY 24

X. OPTIONAL ACCESSORIES 27

XI. BASIC TROUBLESHOOTING 28

XII. CARE AND MAINTENANCE 29

XIII. WARRANTY 31

HURRICANE PMV

COPYRIGHT

Pride cannot be held responsible for any damage or injury incurred due to improper or unsafe use of a Hurricane PMV. Nor can Pride be held responsible for any damage or injury incurred during or resulting from attempts to follow the instructions and recommendations set forth in this owner's manual or in any of the instructions displayed on or accompanying the product itself. If you do not feel capable of safely following any of the instructions and recommendations pertaining to your Hurricane PMV, please contact your authorized Pride provider.

Copyright © 2000
Pride Mobility Products Corp.

I. INTRODUCTION

Welcome to Pride Mobility Products Corporation (Pride). Congratulations on the purchase of your new Hurricane PMV. The Hurricane PMV design combines the most advanced state-of-the-art components with modern, attractive styling. We are certain that the design features and trouble-free operation of your new Hurrican PMV will add convenience to your daily living.

At Pride, your safety is important to us. **Please read and follow all of the instructions in this manual before you attempt to operate your Hurricane PMV for the first time.** These instructions were produced for your benefit. Your understanding of these instructions is essential for the safe operation of your new Hurricane PMV.

This owner's manual is compiled from the latest specifications and product information available at the time of publication. We reserve the right to make changes as they become necessary. Any changes to our products may cause slight variations between the illustrations and explanations in this manual and the product you purchased.

As an owner of a Pride product, you are invited to register your product's warranty and enroll in the Pride Owners Club. You may do so by filling out and returning your enclosed registration card or by visiting Pride's web site at **www.pridemobility.com**. As a registered member, each time you visit our site, you will have access to the most interactive and honest educational venue available today for people with mobility needs, their families, and friends.

From the cover page of our site, click on the button that reads "Owners Club" to enter a page dedicated to current and potential Pride product owners. You will gain access to interviews, stories, recreation ideas, daily living tips, product and funding information, and interactive message boards. On these message boards you are invited to speak with other Pride customers as well as Pride representatives who are available to assist you with any questions or concerns you may have. You will receive a free gift simply for registering with the Pride Owners Club.

We want to hear your questions, comments, and suggestions about this manual. We would also like to hear about the safety and reliability of your new Hurricane PMV, as well as about the service you received from your Pride provider. Also, notify us of any change of address, so we can keep you apprised of important information about safety, new products, and new options that can increase your ability to use and enjoy your Hurricane PMV. Please feel free to write us at the address below:

Pride Mobility Products Corporation
Attn: Technical Service Department
182 Susquehanna Avenue
Exeter, PA 18643-2694

If you experience any problems with your Hurricane PMV that you are not able to solve, or if you do not feel confident in your ability to perform any of the instructions contained in this manual, please contact your local Pride provider. Once you understand how to operate and take care of your Hurricane PMV, we are certain that it will give you years of trouble-free service and enjoyment.

The Pride Team

II. SAFETY

DRIVING GUIDELINES

After beginning to use your Hurricane PMV on a daily basis, you may encounter situations that, at first, may require some practice to negotiate on your PMV. With a little bit of patience and practice, you will soon be able to achieve total control through doorways, elevators, up and down ramps, and over grass and gravel.

Doors

Determine if the door opens toward or away from you. Use your hand to turn the knob or push the handle or push-bar. Drive your Hurricane PMV gently and slowly forward to push the door open; or drive our Hurricane PMV gently and slowly backwards to pull the door open.

Elevators

Modern elevators have a door-edge safety mechanism that, when pushed, will reopen the elevator door(s). If you are in the doorway of an elevator when the door(s) begin to close, push on the rubber door edge or allow the rubber door edge to contact the PMV and the door will reopen. Use care that pocketbooks, packages, or Hurricane PMV accessories do not become caught in the elevator doors.

Ramps and Other Inclines

An increasing number of buildings have ramps for PMV access. There may be a turning switchback in the middle of the ramp which may require proficient cornering skills. Take wide swings with your front wheels around any tight corners, so the back wheels will trace a wide arc and not shortcut the corner. When going down a ramp, it is best to keep your speed dial set to the slowest speed setting to ensure a safely controlled descent. Avoid sudden stops on any incline.

Rough Terrain

Your Hurricane PMV is designed to operate on grass, gravel, and hills. However, you must not exceed the recommendations in this manual. Safety must always come first. If you are uncertain about a situation, avoid it. Feel free to use your Hurricane PMV on lawns or in park areas, but avoid tall grass. Packed gravel, such as in driveways or on roads will not present a problem, but avoid loosely packed gravel or sand. The power of your Hurricane PMV will enable you to climb hills, but to ensure proper stability, do not exceed the specifications listed below.

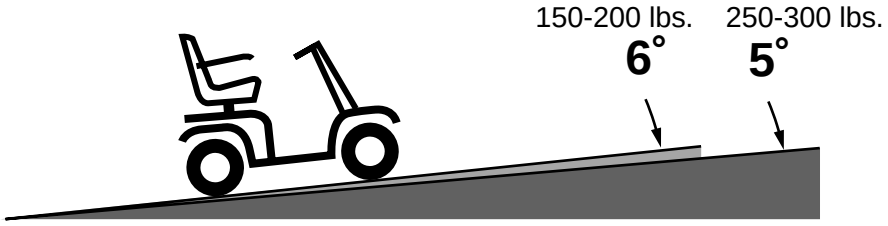


FIGURE 1. INCLINE SPECIFICATIONS

The controlled tests show that, when you approach an incline, it is best to lean forward. See figures 2 and 3. This shifts the center of gravity of you and your Hurricane PMV toward the front of the PMV for improved stability.

Your Hurricane PMV was designed to provide optimum stability under normal driving conditions; dry, level surfaces composed of concrete or asphalt. However, Pride recognizes that there will be times when you will operate your scooter on surfaces other than concrete or asphalt. For that reason, we also designed your Hurricane PMV to perform admirably on packed soil, grass, and gravel.

- Feel free to use your Hurricane PMV safely on lawns and in park areas.
- Avoid tall grass that can entangle the running gear.
- Packed soil, gravel, driveways, or roads will not present a problem for your Hurricane PMV.
- Avoid loosely packed gravel and sand.
- If you feel unsure about a driving surface, avoid that surface.

WARNING! Do not exceed the incline guidelines or any other specifications presented in this manual.

FIGURE 2. NORMAL DRIVING POSITION

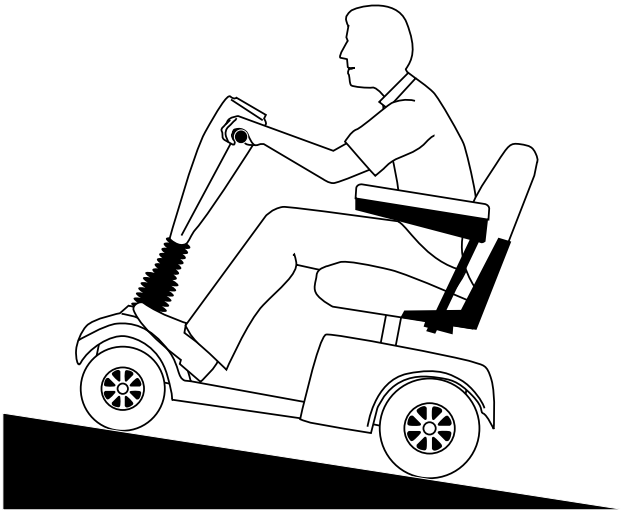


FIGURE 3. INCREASED STABILITY DRIVING POSITION

SAFETY PRECAUTIONS

WARNING! Failure to follow these safety precautions may result in serious personal injury! You may also put others around you at risk!

- Do not operate your Hurricane PMV without completely reading and understanding this manual.
- Do not insert the key into the control console unless you are on the seat and ready to use the vehicle. Remember to remove the key when you get off the vehicle. This eliminates the possibility of accidentally depressing the throttle control lever and causing an accident.
- Do not operate your Hurricane PMV while you are under the influence of alcohol.

II. SAFETY

- Never use your Hurricane PMV as a seat in a moving vehicle. Your Hurricane PMV is not designed to be used as such and cannot protect you in the event of an automobile accident or an abrupt stop.
- Do not carry passengers on your Hurricane PMV under any circumstances.
- Never drive your Hurricane PMV across the side of a hill or diagonally up or down a hill; do not stop, if possible, while driving up or down an incline.
- Do not exceed the specifications in this manual.
- Always protect batteries from freezing temperatures and never charge a frozen battery; this damages the battery and may cause personal injury. Attempting to charge a battery in freezing conditions does not prevent the battery from freezing.
- Keep both hands on the tiller and your feet on the floorboard at all times while operating your Hurricane PMV. This recommended driving position gives you the most control over your vehicle.
- Make certain that the seat is locked into place and the key is removed from the key switch before getting on or off of your Hurricane PMV; make certain that the seat is in a locked position when you are operating your Hurricane PMV.
- Use extreme caution when driving on busy streets, in parking lots, or in shopping malls.
- Proceed with extreme caution when driving near raised surfaces or unprotected ledges or drop-offs (curbs, porches, stairs, etc.).
- Disconnect the batteries if you are not going to operate your Hurricane PMV for more than 48 hours.
- Consult your physician or pharmacist if you are taking any medication(s) that may affect your ability to coherently operate your Hurricane PMV. Your Hurricane PMV is a motorized vehicle that requires coherent mental judgment and unimpaired reflexes.
- Check the tire pressure frequently and make sure they are inflated to 30 psi. Your Hurricane PMV was designed for optimum performance and stability at this tire pressure.
- Secure the batteries before loading your Hurricane PMV into another vehicle for transport.
- Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

WARNING! Do not expose the electronics to any type of moisture at any time (rain, snow, mist, or washing the Hurricane PMV). Such exposure can damage the electronics. Never attempt to ride a Hurricane PMV that has been exposed to moisture until it has dried thoroughly.

WARNING! Do not operate or store the Hurricane PMV where it may be exposed to inclement weather conditions such as rain, snow, mist, and below-freezing temperatures (such as storage on an outside car/van lift). Attempting to operate the Hurricane PMV in such conditions can damage the electronics and potentially result in loss of control.

WARNING! Do not operate a Hurricane PMV in icy or slippery conditions or on salted surfaces (i.e., walks or roads). Such use may result in an accident, personal injury, or adversely affect the performance and/or safety of your Hurricane PMV.

WARNING! Always protect batteries from freezing temperatures and never charge a frozen battery. This damages the battery and may cause personal injury. Attempting to charge a battery in freezing conditions does not prevent a battery from freezing.

III. EMI/RFI

WARNING! Radio waves may interfere with the control of your Hurricane PMV.

Radio waves can cause unintended motion of Hurricane PMVs. Radio waves are a form of electromagnetic energy (EM). When this energy unintentionally affects the operation of an electronic device, it is called ***Electromagnetic Interference (EMI) or Radio Frequency Interference (RFI)***.

EMI/RFI—FREQUENTLY ASKED QUESTIONS (FAQs)

The following FAQs summarize what you should know about EMI/RFI. You may use this information to minimize the risk that EMI/RFI will affect your Hurricane PMV.

Where do radio waves come from?

Radio waves are emitted from the antennas of cellular phones, mobile two-way radios (like walkie-talkies), radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave sources, and paging transmitters. Radio waves are a form of electromagnetic energy. Because EM is more intense closer to the transmitting antenna (source of emission), the EM fields from two-way radios are of special concern.

If my Hurricane PMV is affected by EMI/RFI, what kind of motion should I expect?

This is difficult to predict. It would depend on a number of factors, including:

- Strength of the radio waves.
- Construction of the Hurricane PMV.
- Position of the Hurricane PMV (whether it is on level ground or on a slope).
- Whether or not the Hurricane PMV is in motion.

An affected Hurricane PMV's movement can be erratic. It may move by itself or come to a sudden stop. Furthermore, it is possible for EMI/RFI to unexpectedly release the brakes on a Hurricane PMV. Some intense sources of EMI/RFI can even damage the control system.

Is there any way to know for sure whether radio waves are responsible for the unintended motion of my Hurricane PMV?

Unfortunately, interference from radio wave sources may be difficult to recognize, since the signals from these sources are invisible and may be intermittent. However, you should report all incidents of unintended motion or brake release to the Hurricane PMV manufacturer and, if possible, note whether there was a radio wave source nearby at the time of the incident.

Has anyone been hurt from erratic, unintended motion of personal mobility vehicles?

There are reports of injuries that resulted from the uncontrolled motion of PMVs. However, it is unclear how many of these incidents were actually caused by radio wave interference.

Are all personal mobility vehicles susceptible to EMI/RFI?

Each make and model differs in its ability to resist electromagnetic interference. That is, each has a particular level of "immunity" to interference, measured in volts per meter (V/m). A higher immunity level offers greater protection. In other words, a PMV with a high immunity level is less likely to be affected by a strong radio source than one with a low immunity level.

III. EMI/RFI

What can I do to find out if my Hurricane PMV is likely to be Affected by EMI/RFI?
If you've had your Hurricane PMV for a long time and haven't experienced any unintended motion, it's not likely that you'll have problems in the future. But it's always possible that problems could arise if you are close to a source of radio waves. Therefore, it is very important to be alert to this possibility. If you want to find out how well your Hurricane PMV is protected against EMI/RFI, you can contact the manufacturer and ask about its immunity level.

What can I do to reduce the risk that my Hurricane PMV could be Affected by EMI/RFI?
Here are some precautions you can take:

- Do not turn on or use hand-held personal communications devices, such as citizens band (CB) radios and cellular phones while the Hurricane PMV is on.
- Be aware of nearby transmitters, such as radio or TV stations and hand-held or mobile two-way radios, and try not to come close to them. For example, if you are in a Hurricane PMV with an immunity level of 20 V/m, you should remain at least three feet from a hand-held two-way radio and ten feet from a mobile two-way radio.
- Be aware that adding accessories and/or components, or modifying the Hurricane PMV may make it more susceptible to interference from radio wave sources. There is no easy way to evaluate their effect upon the overall immunity of the Hurricane PMV.

What should I do if my Hurricane PMV moves unexpectedly?
If unintended motion or brake release occurs, turn the Hurricane PMV off as soon as it is safe to do so.

If my Hurricane PMV moves unexpectedly, where should I report this?
Call Pride Mobility Products Corporation at 1-800-800-8586 to report the incident.

IV. SPECIFICATIONS

Model Numbers	**PMV-500:** (Candy Apple Red), **PMV-501** (Forest Green), **PMV-502** (Viper Blue), **PMV-503** (Mercury Silver), **PMV-505** (Onyx Black)
Length	55.5in.
Width	25in.
Tires	Type: Pneumatic Front: 4in. x 13in. Rear: 4in. x 13in.
Weight capacity	300 lbs. Maximum
Battery Type (Batteries not included)	Choice of: Two 12 volt, 32 AH, U-1 type, SLA (Sealed Lead-Acid) or Two 12 volt, 40 AH, U-1 type, SLA (Sealed Lead-Acid)
Horsepower	2.0 hp (peak)
Charger	Onboard 5-amp charger
Speed (max)	Variable up to 8 mph
Maximum grade	Please refer to figure 1.
Range	20-25 miles per charge with 32 AH batteries 25-30 miles per charge with 40 AH batteries
Turning radius	43in.
Body colors	Painted: Candy Apple Red, Forest Green, Viper Blue, Mercury Silver, or Onyx Black
Seating	**Style:** High back w/headrest and sliders **Dimensions:** 19.5in. width (usable) x 25in. to 28in. height (usable) x 18.5in. depth **Seat Cover Material:** Vinyl; Gray, Brown, or Beige **Armrests:** Match **User Adjustable seat height from ground:** 25.5 in. to 28.5 in. **User Adjustable seat height from scooter deck:** 18 in. to 21 in.
Included Features	Sliding seat, Slime® tire sealant, energy-saving auto shutoff feature, height adjustable armrests, front and rear suspension, front basket, rearview mirror, full light package, front and rear bumpers
Brakes	Electronic regenerative braking and electromechanical disc brake
Rear Wheel Drive	Sealed transaxle, 24 VDC motor
Wheels	Pride Micro-Mag aluminum alloy wheels in black, red, or gold
Tiller Type	Infinitely adjustable between forward stop and scooter deck
Free Wheel mechanism	Freewheel release lever located on transaxle
Weight of Scooter	**Weight of Hurricane (with two 12V 40AH batteries = 234.5 lbs.)** **Weight of Hurricane (with two 12V 32AH batteries = 219.5 lbs.)** **Weight of Hurricane (without batteries = 169.5 lbs.)** **Component breakdown:** Front section: 61.5 lbs. Rear section (without batteries or rear shroud): 68.5 lbs. Rear plastic shroud: 3.5 lbs. Seat: 36.0 lbs. Batteries: (two batteries are required per scooter): 12 volt, 40 AH 32.5 lbs. each. 12 volt, 32 AH 25.0 lbs. each.
	Lock pin and lever system
Ground Clearance	6 in.
Optional Accessories	Cup holder, rear basket, rear bumper, dust cover, flag

IV. SPECIFICATIONS

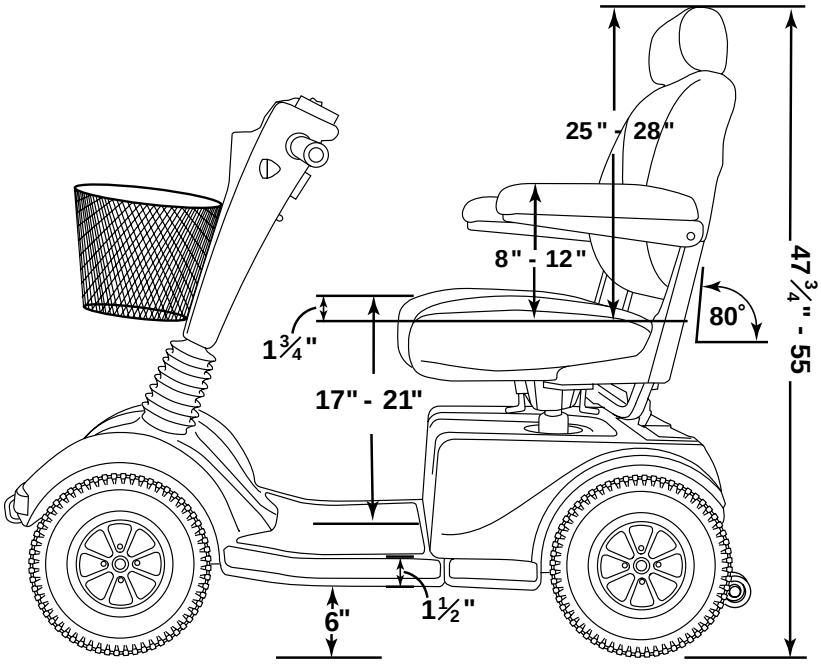
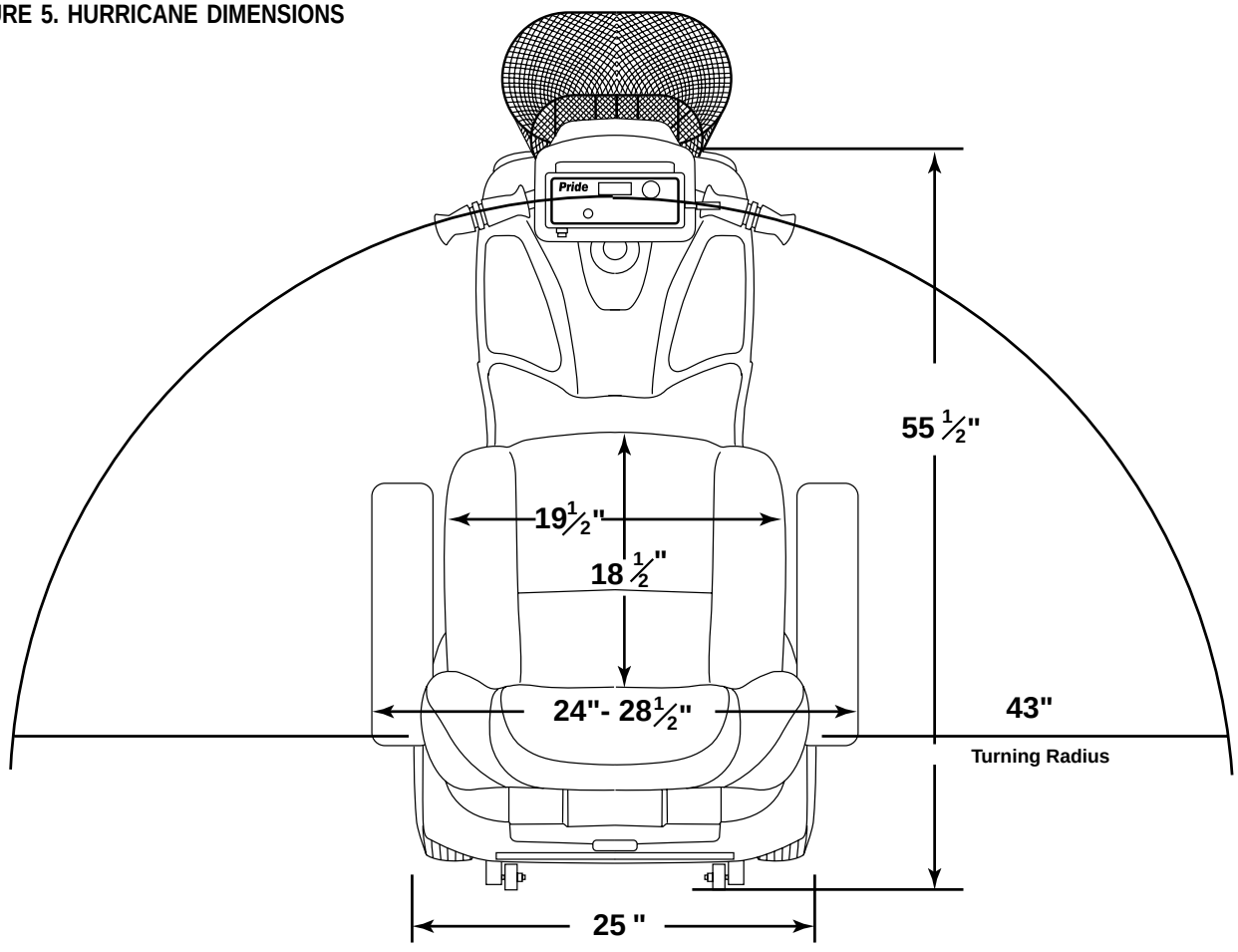


FIGURE 5. HURRICANE DIMENSIONS



V. DESCRIPTION

CONTROL CONSOLE ASSEMBLY

This assembly houses all of the controls you need to drive your Hurricane PMV.

> **WARNING!** Keep the console free from moisture. In the event that the console becomes exposed to moisture, do not attempt to operate the Hurricane PMV until it has been dried thoroughly.

Battery Condition Meter

Whenever you have the key fully inserted, this meter gives an approximate reading of your Hurricane PMV's battery voltage. See figure 6.

Horn Button

The key must be fully inserted into the key switch for the horn to be operational. This button activates a warning horn. Do not hesitate to use the warning horn when its use could prevent accident or injury. See figure 6.

Throttle Control Lever

This lever allows you to control the forward speed and the reverse speed of your Hurricane PMV up to the maximum speed you preset with the speed adjustment dial. Place your right hand on the right handgrip and your left hand on the left handgrip. Use your right thumb to push the right side of the lever to disengage your Hurricane PMV's brake and move forward. Release the lever and allow your Hurricane PMV to come to a complete stop before pushing the other side of the lever to move in reverse. When the throttle is completely released, it automatically returns to the center (stop) position and engages your Hurricane PMV's brake. See figure 6.

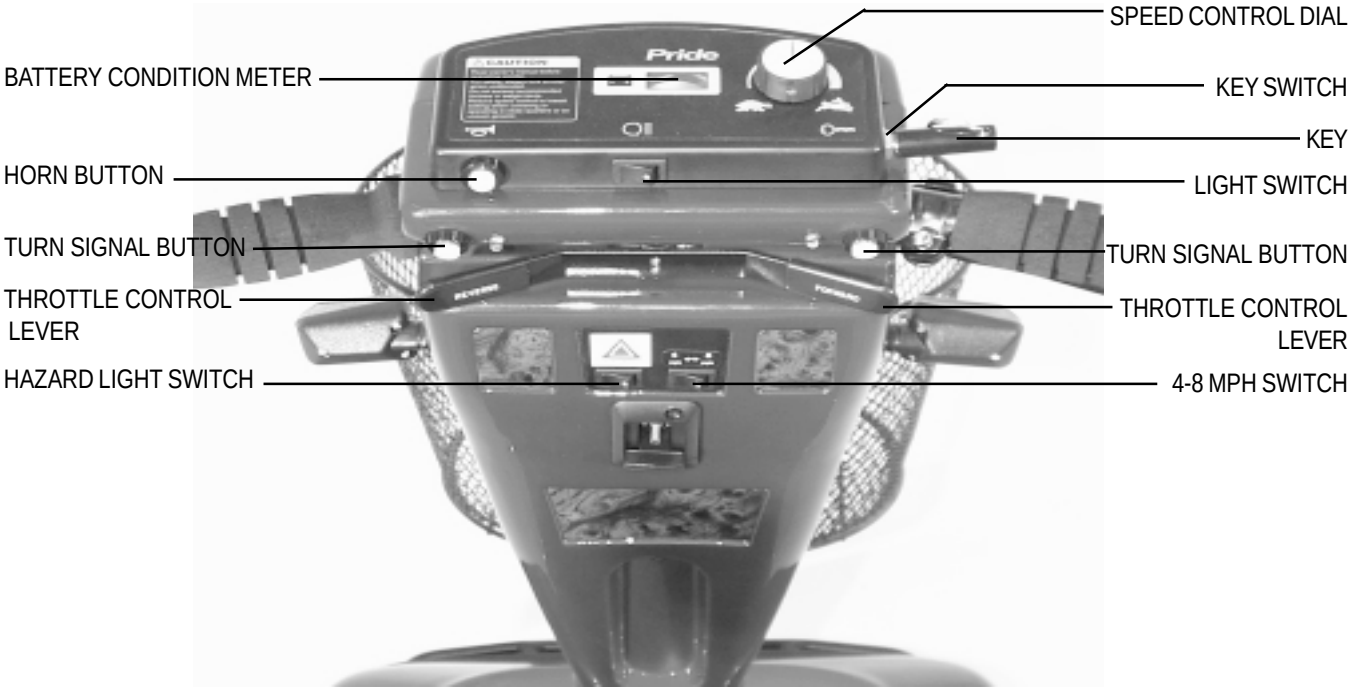


FIGURE 6. CONTROL CONSOLE ASSEMBLY

V. DESCRIPTION

Speed Adjustment Dial
This control dial allows you to preselect and limit your Hurricane PMV's top speed. The image of the tortoise represents the slowest speed setting. The image of the hare represents the fastest speed setting. See figure 6.

Key Switch
To turn the Hurricane PMV on, fully insert the key. To turn the Hurricane PMV off, pull the key out. See figure 6.

4 mph - 8 mph Switch
This switch limits the Hurricane PMV's top speed to either 4 or 8 mph. See figure 6.

Light Switch
This switch operates the headlight, and also operates the operational taillights. See figure 6.

Hazard Light Switch
The hazard light switch operates the amber hazard lights on both the front and back of the Hurricane PMV. See figure 6.

REAR SECTION
The utility tray is located in the rear of the Hurricane PMV under the rear shroud. See figure 7. The rear shroud is secured in place by small reusable fastener strips.

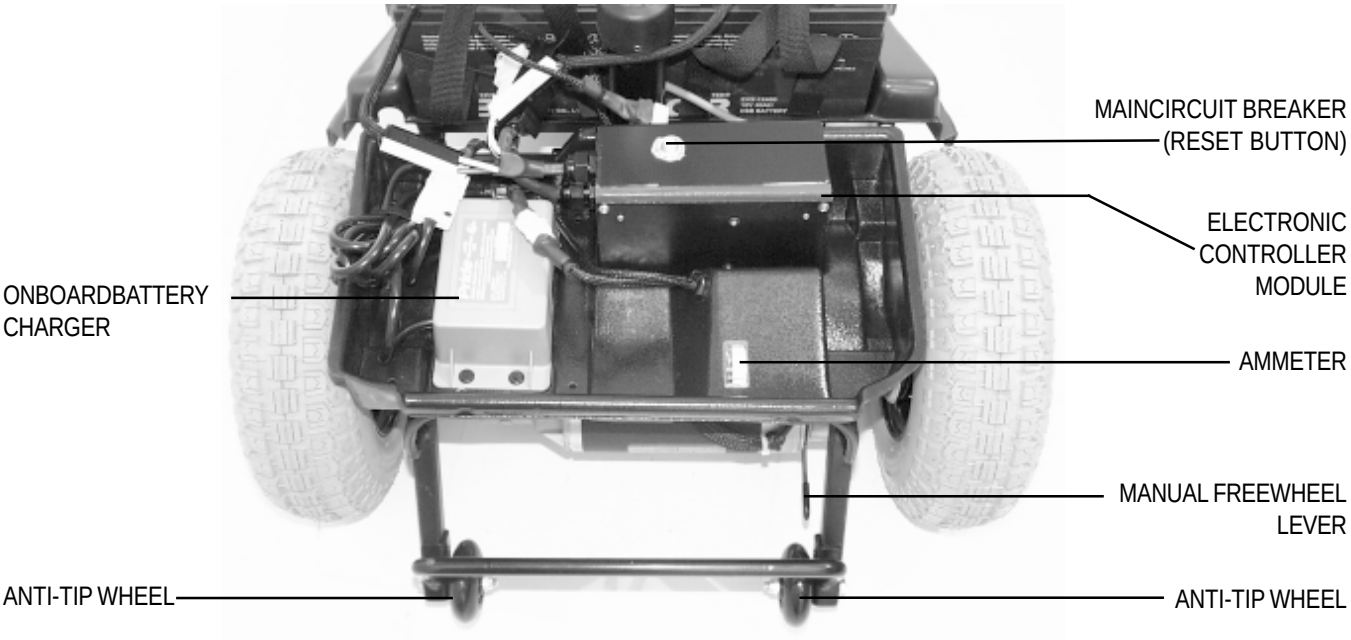


FIGURE 7. UTILITY TRAY

V. DESCRIPTION

OnBoard Battery Charger

The battery charger is located in the left corner of the utility tray. See figure 7. This is a gray colored plastic box with a green LED indicator on the exterior of the case. The main power cord extends from the charger and should be coiled to the side of the trunk. Use the reusable fastener strap to coil the power cord.

To ensure that the charger and its power cord do not become damaged, exercise caution when storing personal items in the electronics module . Also be aware that the battery charger could warm up during battery charging.

Electronic Controller Module

The electronic controller module is on the right side of the utility tray. See figure 7. This controller receives directions from the control console assembly and sends power to the motor, the brakes, and the lighting system.

> **!** WARNING! Keep the electronic controller module free from moisture. In the event that the electronics become exposed to moisture, do not attempt to operate the Hurricane PMV until it has been dried thoroughly.

Main Circuit Breaker

When the voltage in your Hurricane PMV's batteries becomes low and your Hurricane PMV is heavily strained because of excessive loads or steep inclines, the main circuit breaker may trip to protect your Hurricane PMV's motor and electronics from damage. The main circuit breaker is mounted on the electronic controller assembly. See figure 7. The main circuit breaker reset button pops out when the breaker trips. When the breaker trips, the entire electrical system of your Hurricane PMV is shut down. Allow a minute or so for your Hurricane PMV's electronics to "rest." Push in the reset button to reset the breaker. If the breaker trips frequently, you may need to charge your batteries more often. You may also need to have your Hurricane PMV dealer perform a load test on your Hurricane PMV's batteries. If the main circuit breaker trips repeatedly, see your authorized Pride provider for service.

Ammeter

The ammeter is located on the utility tray. See figure 7. You can check the charge level of the batteries by the ammeter. The battery charger must be plugged into a power outlet to obtain a reading. When the amperage reading is at or near zero (0) amps, the battery charging is complete.

Anti-Tip Wheels

The anti-tip wheels are a vital safety feature of your Hurricane PMV. Never remove the anti-tip wheels. They prevent the Hurricane PMV from tipping backwards on an incline. See figure 7.

Handbrake (Optional)

The handbrake lever is located on the tiller handle. It offers additional stopping power. You must release the throttle when using this brake, otherwise the Hurricane PMV may not come to a complete stop.

Manual Freewheel Lever

When you need to push your Hurricane PMV for short distances, you can place it in manual freewheel mode. The manual freewheel lever is located on the end of the motor assembly (right rear of the PMV). Pull this lever up to disable the drive system. The motor is also electrically disengaged from the control box and will not run when you press the throttle lever. See figure 7.

VI. BATTERIES AND CHARGING

BATTERIES AND BATTERY CHARGING—FREQUENTLY ASKED QUESTIONS (FAQs)

How does the charger work?
When your Hurricane PMV's battery voltage is low, the charger works extra and sends more electrical current to the batteries to bring up their charge. As the voltage of the batteries approaches a full charge, the charger works less to complete the charging cycle by sending less and less electrical current to the batteries. When the batteries are fully charged, the current being sent to them from the charger is at nearly zero amperage. Therefore, when the charger is plugged in, it maintains the charge on your Hurricane PMV's batteries, but it does not overcharge them. We do not recommend that you charge your Hurricane PMV's batteries for more than 24 consecutive hours.

What does the LED on the charger indicate?
The green LED turns on after the batteries have been fully charged. In some instances, the green LED may stay on after the charger has been unplugged from the wall outlet. Although users may perceive this as a charger malfunction, it is a normal condition. The green LED goes off when the batteries reach 26 VDC, which may take a few minutes.

Can I use a different charger?
For the safest, most efficient, and balanced charging of your Hurricane PMV's batteries, we prefer and highly recommend the simultaneous charging of both batteries by use of the onboard battery charger.

How often must I charge the batteries?
Two major factors must be considered when deciding how often to charge your Hurricane PMV's batteries.

- All day PMV use on a daily basis.
- Infrequent or sporadic PMV use.

With these considerations in mind, you can determine just how often and for how long you should charge your Hurricane PMV's batteries. We designed the onboard charger so that it does not overcharge your PMV's batteries (do not charge them for more than 24 consecutive hours). However, you may encounter some problems if you do not charge your batteries often enough and if you do not charge them on a regular basis. Follow the five guidelines below to provide safe and reliable battery operation and charging.

- If you use your Hurricane PMV daily, charge its batteries as soon as you finish using it for the day. Your Hurricane PMV will be ready each morning to give you a "full day" of service. We recommend that you charge your Hurricane PMV's batteries for 8 to 14 hours after daily use.
- If you use your Hurricane PMV once a week or less, charge its batteries at least once a week for 12 to 14 hours at a time.
- Keep your Hurricane PMV's batteries fully charged.
- Avoid deeply discharging your Hurricane PMV's batteries.
- Do not charge your Hurricane PMV's batteries for more than 24 consecutive hours.

VI. BATTERIES AND CHARGING

How can I get maximum range or distance per charge?
Rarely will you have ideal driving conditions; smooth, flat, hard driving surfaces with no wind or curves. You will often face hills, sidewalk cracks, uneven and loosely packed surfaces, curves, and wind. All of these driving conditions affect the distance or running time per battery charge. The following are a few suggestions for obtaining the maximum range per battery charge.

- Always fully charge your Hurricane PMV's batteries prior to your daily use.
- Maintain 30 psi (pounds per square inch) in all of your Hurricane PMV's tires.
- Plan your route ahead to avoid as many hills, cracked, broken, or soft surfaces as possible.
- Limit your baggage weight to essential items.
- Try to maintain an even speed while your Hurricane PMV is in motion.
- Avoid stop-and-go driving.

What type and size of battery should I use?
We recommend deep-cycle batteries that are sealed and maintenance free. Both Sealed Lead-Acid (SLA) and Gel Cell are deep-cycle batteries that offer similar performance in your Hurricane PMV. Do not use wet-cell batteries, which have removable caps.

NOTE: Do not remove the caps from sealed batteries. Water cannot be added to sealed batteries. Cap removal voids the battery warranty and may cause damage to the batteries and to your Hurricane PMV.

Use these specifications to reorder deep-cycle batteries:

Type:	Deep-cycle (sealed lead-acid or gel cell)
Size:	U-1
Voltage:	12 volts each
Amperage:	32 AH (amp hours) or 40 AH (amp hours)

To change a battery in your Hurricane PMV:

WARNING! Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

1. Remove the seat and the rear shroud. See IX. "Disassembly and Assembly."
2. Disconnect the battery tie-down strap.
3. Disconnect the battery cables from the electronic controller module.
4. Disconnect the battery cables from the battery terminals.
5. Remove the old battery.
6. Place a new battery in the battery well.
7. Connect the red battery cable to the positive (+) battery terminal.
8. Connect the black battery cable to the negative (-) battery terminal.
9. Reconnect the battery cables to the electronic controller module.
10. Reconnect the battery tie-down strap.
11. Reinstall the rear shroud and the seat.

VI. BATTERIES AND CHARGING

Why do my new batteries seem weak?
Deep-cycle batteries employ a different chemical technology than is used in car batteries, nickel-cadmium batteries (nicads), or in other common battery types. Deep-cycle batteries are specifically designed to provide power, drain down their charge, and then accept a relatively quick recharge.

We work closely with our battery manufacturers to provide batteries that best suit your Hurricane PMV's specific electrical demands. Fresh batteries arrive daily at Pride and are shipped fully charged to our customers. During shipping, the batteries may encounter temperature extremes that may influence their initial performance. Heat diminishes the charge on the battery; cold slows the available power and extends the time needed to recharge the battery.

It may take a few days for the temperature of your Hurricane PMV's batteries to stabilize and adjust to their new room or ambient temperature. More importantly, it takes a few charging cycles (a partial drain followed by a full recharge) to establish the critical chemical balance that is essential to a deep-cycle battery's peak performance and long life.

Please follow these steps to properly break in your Hurricane PMV's new batteries for maximum efficiency and service life.

1. Fully recharge any new battery prior to its initial use. This charging cycle brings the battery up to about 88% of its peak performance level.
2. Operate your new Hurricane PMV in familiar and safe areas. Drive slowly at first, and do not travel too far from your home or familiar surroundings until you have become accustomed to your Hurricane PMV's controls and have properly broken in your PMV's batteries.
3. Fully recharge the batteries. They should now be at over 90% of their peak performance level.
4. Operate your Hurricane PMV again.
5. Fully recharge the batteries again.
6. After four or five charging cycles, the batteries are able to receive a charge of 100% of their peak performance level and are able to last for an extended period of time.

How can I ensure maximum battery life?
Fully charged deep-cycle batteries provide reliable performance and extended battery life. Keep your Hurricane PMV's batteries fully charged whenever possible. Batteries that are regularly and deeply discharged, infrequently charged, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life.

How should I store my Hurricane PMV and its batteries?
If you plan on not using your Hurricane PMV for an extended period of time, it is best to:

- Fully charge its batteries prior to storage.
- Disconnect the battery harnesses from the electronic controller module.
- Store your Hurricane PMV in a warm dry environment.
- Avoid storing your Hurricane PMV where it will be exposed to temperature extremes.

WARNING! If your Hurricane PMV's batteries do become frozen, do not attempt to charge them. Cold or frozen batteries should be allowed to warm up for several days prior to recharging.

VI. BATTERIES AND CHARGING

For prolonged storage, you may wish to place several boards under the frame of your Hurricane PMV to raise the PMV off of the ground. This takes the weight off of the tires and minimizes the possibility of flat spots from developing on the areas of the tires contacting the ground.

What about public transportation?
If you intend to use public transportation while using your PMV, you must contact in advance the transportation provider to determine their specific requirements.

VII. OPERATION

PRE-RIDE ADJUSTMENTS AND CHECKS

- Have you fully charged the batteries? See VI. “Batteries and Charging.”
- Are the manual freewheel levers in the drive (up) mode? See V. “Description.” Never leave the freewheel lever pushed down unless you are manually pushing your Hurricane PMV.
- Is your proposed path clear of people, pets, and obstacles?
- Have you planned your route to avoid adverse terrain and as many inclines as possible?
- Are you positioned comfortably in the seat? See “Getting On Your Hurricane PMV,” below.
- Is the seat at the proper height? See VIII. “Comfort Adjustments.”
- Is the seat locked securely in place? See VIII. “Comfort Adjustments.”
- Is the tiller handle at a comfortable setting and locked securely in place? See VIII. “Comfort Adjustments.”
- Is the key fully inserted into the key switch? See V. “Description.”
- Is the speed adjustment dial set to a slow setting? V. “Description.”
- Are you grasping the handgrips with a thumb resting on each of the throttle levers? See V. “Description.”
- Does your Hurricane PMV’s horn work properly?

GETTING ON YOUR HURRICANE PMV

1. Make certain that the key is removed from the key switch.
2. Stand at the side of your Hurricane PMV.
3. Push down on the seat rotation lever to unlock the seat and rotate the seat until it faces you; release the seat rotation lever to lock the seat securely in place.
4. Position yourself comfortably and securely in the seat.
5. Push down on the seat rotation lever and rotate the seat until you face forward; release the seat rotation lever to lock the seat securely in place.
6. Make certain that your feet are safely on the floorboard.

OPERATING YOUR HURRICANE PMV

After planning your route:

- Set the 4 - 8 mph switch to your desired maximum speed of 4 or 8 mph; then set the speed adjustment dial to your desired speed. We recommend you initially set the 4 - 8 mph switch to 4 mph and the speed adjustment dial to the tortoise (slowest speed setting).
- Insert the key into the key switch.
- With your hands on the handgrips, use your thumb to gently push the right throttle lever to disengage your Hurricane PMV’s brakes and move forward; the electric brake automatically disengages and the Hurricane PMV accelerates smoothly to the speed you set with the speed adjustment dial.
- Pull on the left handgrip to steer your Hurricane PMV to the left.
  Pull on the right handgrip to steer your Hurricane PMV to the right.
- Move the tiller to the center position to drive straight ahead.
- Gently release the throttle lever to decelerate and come to a complete stop. The electric brake automatically engages when your Hurricane PMVcomes to a stop.
- To move in reverse, use your thumb to gently push the left throttle lever to disengage your Hurricane PMV’s brakes and move rearward.

VII. OPERATION

NOTE: Your Hurricane PMV's reverse speed is 40% slower than the speed you set with the speed adjustment dial and the 4 - 8 mph switch.

GETTING OFF OF YOUR HURRICANE PMV

1. Bring your Hurricane PMV to a complete stop.
2. Make certain that the key is removed from the key switch.
3. Push down on the seat rotation lever to unlock the seat and rotate the seat until you are facing toward the side of your Hurricane PMV; release the seat rotation lever to lock the seat securely in place.
4. Carefully get out of the seat and stand to the side of your Hurricane PMV.
5. You may, if you wish, leave the seat facing to the side to facilitate boarding your Hurricane PMV the next time you are going to operate it.

AUTO SHUTOFF FEATURE

Your Hurricane PMV is equipped with an energy saving auto shutoff feature that is designed to preserve your scooter's battery life. If you mistakenly leave the key in your Hurricane PMV but do not use the PMV for approximately 20 minutes, the PMV automatically shuts down.

If your Hurricane PMV'S auto shutoff feature takes effect, perform the following steps to resume normal operation:

- Remove the key from the key switch.
- Reinsert the key into the key switch.

Your Hurricane PMV should resume normal operation.

VIII. COMFORT ADJUSTMENTS

TILLER ANGLE

You can adjust the tiller to any number of positions between the forward stop and the PMV deck. The tiller adjustment lever keeps the tiller in position. Pull up on the tiller adjustment lever. See figure 8. Move the tiller to a comfortable position. Release the tiller adjustment lever. The tiller remains in that position. Figure 9 shows the Hurricane PMV's tiller in the lowest possible position.

NOTE: The batteries and seat must be removed to achieve the lowest tiller angle position.

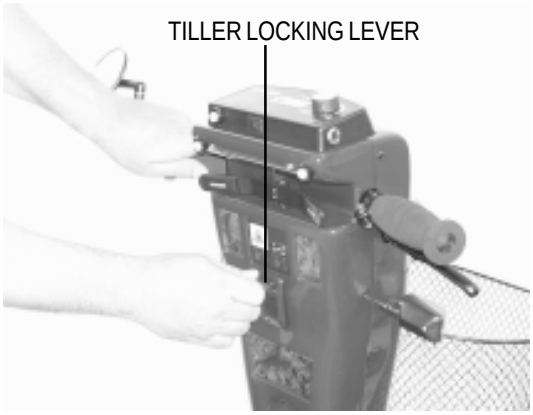


FIGURE 8. TILLER ADJUSTMENT LEVER

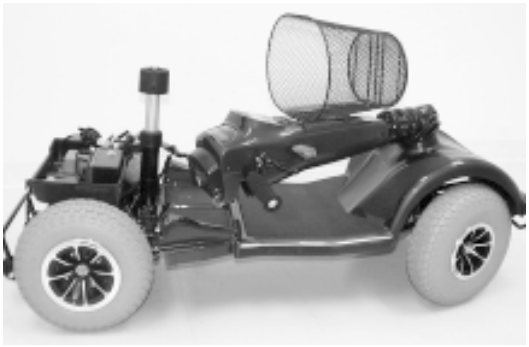


FIGURE 9. TILLER FULLY LOWERED

SEAT HEIGHT ADJUSTMENT

The seat height can be adjusted pneumatically to any height between 18 inches and 21 inches from the PMV deck. To raise the seat, pull upward on the seat height adjustment lever while taking your weight off of the seat. See figure 10. Release the seat height adjustment lever when the seat reaches the desired height. To lower the seat, pull upward on the seat height adjustment lever while seated. Release the seat height adjustment lever when the seat reaches the desired height.

SLIDING SEAT

The Hurricane PMV is equipped with a sliding seat that is operated like an automobile seat. You can reposition the seat forward or rearward. Pull up on the slider lever. See figure 10. Move the seat forward or rearward. Release the slider lever when the seat reaches the desired position.

SEAT ROTATION

The seat rotation lever locks the seat in one of four positions. Pull up on the seat rotation lever to unlock the seat. See figure 10. Rotate the seat to the desired position. Release the seat rotation lever to lock the seat securely in place.

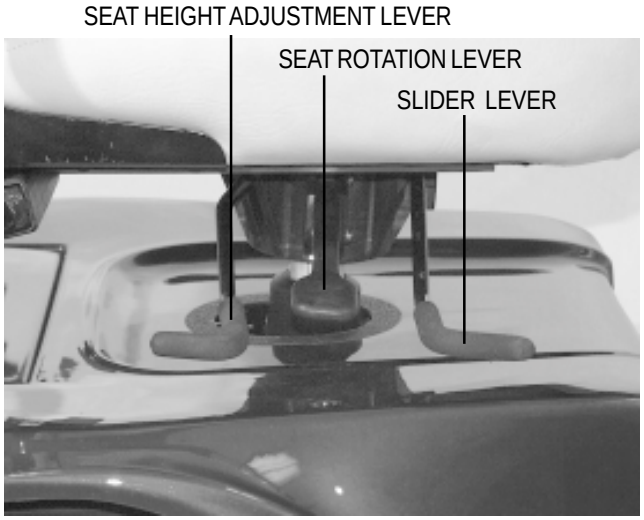


FIGURE 10. SEAT LEVERS

VIII. COMFORT ADJUSTMENTS

HIGH-BACK SEAT HEADREST

Your high-back seat has an adjustable headrest that locks into three different positions. To raise or lower the headrest, press the lock release button and slide the headrest up or down until it locks into place. See figure 11.

FIGURE 11. HIGH-BACK SEAT HEADREST

ARMREST WIDTH

You may adjust the armrests to various widths. Just loosen each of the large thumbscrews on the rear of the seat frame, slide the armrests either in or out, then retighten the thumbscrews. You can also fold the armrests up or down to make getting on and off the Hurricane PMV easier. See figure 12.

FIGURE 12. ARMREST WIDTH ADJUSTMENT

ARMREST HEIGHT

You will need the following tools to adjust the height of the armrests: 5/32in. hex key, 1/8in. hex key, 7/16in. wrench

1. Loosen the setscrew on the side of the height adjustment tube with the 1/8in. hex key. See figure 13.
2. Loosen and remove the acorn nut and screw holding the height adjustment tube in place.
3. Raise or lower the height adjustment tube to the desired height.
4. Align the holes in the adjustment tube with the holes in the armrest upright.
5. Insert the screw through the holes in both the height adjustment tube and the armrest upright.
6. Install and tighten the acorn nut.
7. Tighten the setscrew on the side of the height adjustment tube.
8. Repeat for the other armrest.

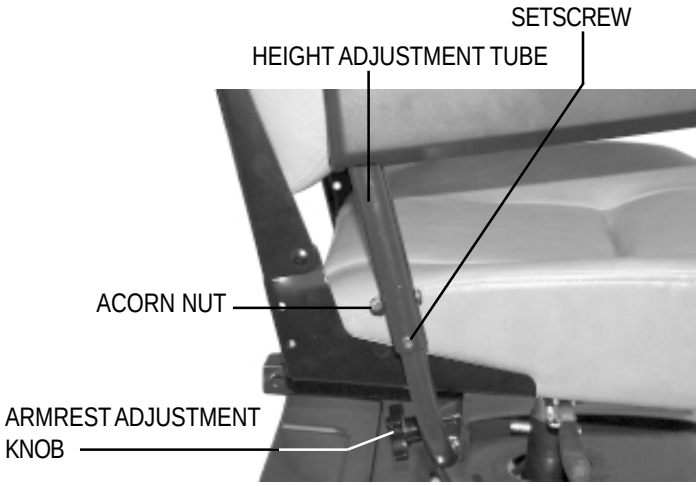


FIGURE 13. ARMREST HEIGHT ADJUSTMENT

IX. DISASSEMBLY AND ASSEMBLY

The Hurricane PMV requires no tools for disassembly or assembly. Always disassemble or assemble your Hurricane PMV on a level, dry surface with sufficient room for you to work and move around your PMV. Keep in mind that the disassembled sections of the Hurricane PMV will take up more floor space than the assembled Hurricane PMV.

You can disassemble the Hurricane PMV into six pieces: the seat, the front frame, the rear frame, the rear shroud, and the batteries. You can also remove the utility tray if necessary. Place the PMV in an area where you have sufficient clearance to move the parts around. You need about four or five feet in all directions. You may need assistance to lift some of the PMV components. See IV. "Specifications" for individual component weights.

DISASSEMBLY

1. Place the manual freewheel lever in the drive (down) position.

2. Unplug the charger, coil the cord, and store it in the rear compartment.

3. Pull up on the seat lock rotation to unlock the seat. Rotate the seat an eighth of a turn and lift the seat up and off of the Hurricane PMV.

4. Gently lift the rear shroud off of the Hurricane PMV.

5. Unplug the rear lighting harness. See figure 14.

6. Unplug the large, white, 9-pin front-to-rear cable harness that connects the front control console harness to the electronic controller module. See figure 15.

7. Disconnect the motor harness. (This is only necessary if removing the utility tray.) See figure 16.

8. Disconnect the battery tie-down strap.

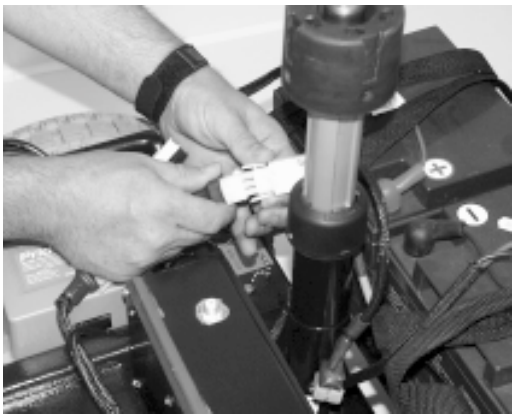


FIGURE 15. FRONT-TO-REAR CABLE HARNESS

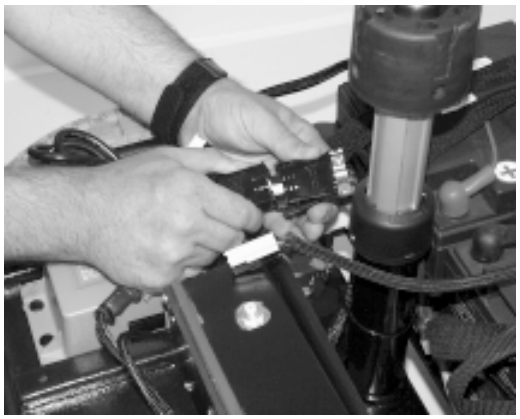


FIGURE 16. MOTOR HARNESS

FIGURE 14. REAR LIGHTING HARNESS

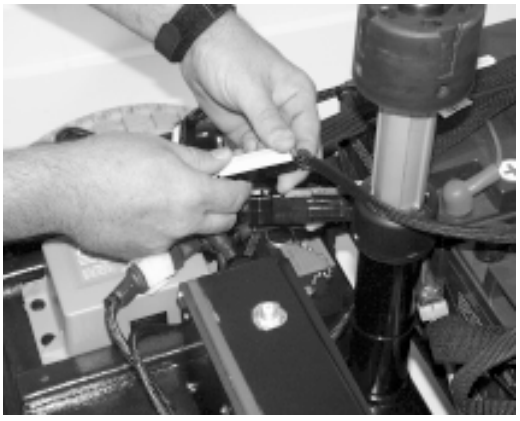


FIGURE 17. BATTERY HARNESS

9. Unplug both battery harnesses and lift both batteries off of the Hurricane PMV. See figures 17 and 18.

> **CAUTION!** Failure to unplug both battery harnesses and the control console harness prior to disassembly could result in permanent damage to the PMV.

10. Grab the handle grip on the tiller, pull upward on the release lever, and gently lower the tiller down to the center of the Hurricane PMV chassis until it is fully lowered. See figure 9.

11. Remove the ball detent pins. See figure 19.

12. Lift the locking levers. See figure See figure 20.

13. Gently slide the front and rear sections apart. See figure 21.

FIGURE 19. BALL DETENT PIN

FIGURE 20. FRAME LOCK LEVER

FIGURE 18. BATTERY INSTALLATION

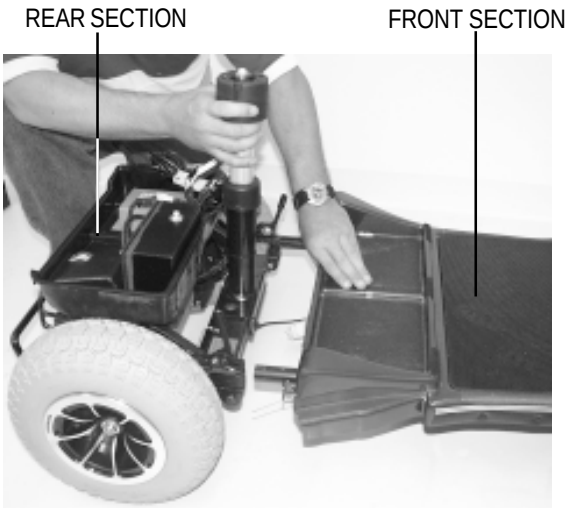


FIGURE 21. FRONT AND REAR CHASSIS SECTIONS

IX. DISSASSEMBLY AND ASSEMBLY

ASSEMBLY

1. Place the manual freewheel lever in drive (down) position.

2. Position the front and rear sections togeather. See figure 21.

3. Make sure that the locking cam levers are vertically positioned and the locking pins are removed. Tilt the rear end to a horizontal position and insert the longer tube of the front end into the rear section.

4. Slide the two sections of the unit together until the front half reaches its insertion limit.

5. Secure front and rear sections with ball detent pins. See figure 19.

6. Push the frame lock levers back to their locked (downward) position.

7. Plug the large, white, 9-pin, plastic harness from the front section of the Hurricane PMV into the mating plug extending from the electronic controller module on the utility tray. See figure 15. The two orange dots present on both plugs should be adjacent to each other and enable quick plug mating.

8. Put the batteries in place and plug the 2-pin battery harnesses into the adjoining harnesses that are also located on the electronic controller module. See figures 17 and 18.

9. Connect the battery tie-down strap.

10. Connect the 6-pin motor harness. See figure 16.

11. Gently place the rear shroud over the seat pedestal. See figure 18.

12. Connect the rear light harness. See figure 14.

13. Slide the shroud down in place. Make sure that the rear plastic shroud does not make any contact with the rear wheels.

14. Carefully lift the seat and slide the seat platform (on the seat bottom) onto the seat pedestal.

15. Rotate the seat until it locks into place.

X. OPTIONAL ACCESSORIES

For information concerning these accessories, see your authorized Pride provider or call Pride Mobility Products Corporation at 1-800-800-8586

CUP HOLDER

DUST COVER

FLAG

XI. BASIC TROUBLESHOOTING

Any electromechanical device occasionally requires maintenance, but be assured that many common problems are usually solved easily with a bit of common sense. Ask yourself what works and what doesn't. Try each and every control on the Hurricane PMV to see if your problem follows any pattern.

Ask yourself , "Is the whole Hurricane PMV dead or just some of its functions?"

What if all systems on theHurricane PMV appear to be dead?

1. Make sure the key is fully inserted.
2. Check the battery condition meter to verify that your batteries are fully charged.
3. The control console assembly is equipped with a timer that shuts the unit off whenever it has been idle for several minutes without any operation. Pull out the key, wait a few seconds, and reinsert the key for normal operation.
4. Check the main circuit breaker. Push it in to reset the main circuit breaker located on the controller (in the rear section of the Hurricane PMV).
5. Make sure both battery harnesses are firmly connected to the electronics module connectors and at the battery terminals.
6. Verify that the front console control harness is firmly plugged into the rear connector mounted on the front side of the electronic control module.
7. If none of these steps work, call your local authorized service center.

What if the unit is dead and the brakes are released?

The Hurricane PMV was probably left in the manual freewheel mode. When the manual freewheel lever is pulled up, the brakes are disengaged and all the power to the motor is cut. Push the lever down for normal operation.

What if the main circuit breaker (located on the utility tray) repeatedly trips?

1. Charge your batteries more frequently.
2. If this continues, have both batteries load tested by your authorized service center.
3. Check that foreign objects, such as rope or wire, have not become jammed in the wheel assemblies.
4. Make sure you do not exceed the maximum weight capacity of the PMV.

What if the console meter dips far downward when pressing the throttle control lever and the motor surges and/or hesitates?

1. Fully charge your batteries.
2. Have your dealer perform a load test of both batteries.
3. Have the two motor brushes cleaned and replaced if necessary.

If you experience any problems with your Hurricane PMV that you are not able to solve, immediately contact your provider for proper information, maintenance, and service.

XII. CARE AND MAINTENANCE

Your Hurricane PMV was designed to require a minimal amount of care and maintenance. If you have any doubts about its care or operation, you may schedule inspection and maintenance at your authorized PMV provider.

The following areas require periodic inspection and/or care and maintenance:

TIRE PRESSURE

- For optimum scooter performance we recommend that the tire pressure be maintained at 30 psi.

> **!** WARNING! Do not exceed that pressure; overinflating a tire can cause it to explode.

TIRE CONDITION AND TREAD WEAR

Regularly inspect your Hurricane PMV's tires for signs of wear. Use a rubber conditioner on your Hurricane PMV's tires to help preserve them.

> **!** WARNING! Do not put rubber conditioner on tread area of tires; the tires may become dangerously slippery.

ABS PLASTIC SHROUDS

The shrouds have been sprayed with a clear sealant coating. They retain their high gloss with a light application of car wax.

OTHER EXPOSED SURFACES

- Bumpers and trim also benefit from an occasional application of rubber or vinyl conditioner. Do not use a rubber or vinyl conditioner on the Hurricane PMV's floormat or vinyl seat; they may become dangerously slippery.

BATTERY TERMINAL CONNECTIONS

- Be sure they remain tight and are not corroded. Batteries must sit flat within the battery well area with the battery terminals facing the rear of the Hurricane PMV.

WIRING HARNESSES

- Check for insulation damage, especially the battery charger cord. If there is damage to this cord, you should have it repaired or replaced prior to next use.

NOTE: To avoid undue tension on the wiring harnesses when disassembling the front and rear halves of the Hurricane PMV, always disconnect the 9-pin front-to-rear harness and the two battery harnesses first.

SEAT POST

- We recommend you periodically clean dirt and grime from the detached post with any lubricant solution (such as WD40) and then wipe any excess buildup away with a soft cloth.

XII. CARE AND MAINTENANCE

FRONT AXLE BEARINGS, REAR AXLE BEARINGS, AND MOTOR/TRANSAXLE ASSEMBLY

- All drive train components are prelubricated and sealed. They require no additional lubrication.

THE CONTROL CONSOLE ASSEMBLY AND ELECTRONIC CONTROLLER MODULE

- Be sure to keep these areas free from moisture. In the event that these components are exposed to moisture, let them dry thoroughly before attempting to operate your PMV again.

STORAGE

- This is an electronically-controlled motorized vehicle. Do not store the Hurricane PMV where it may be exposed to inclement weather.

XIII. WARRANTY

THREE-YEAR LIMITED WARRANTY

Structural frame components; including platform, fork, seat post, and frame.
Drive train; including transaxle, motor, and brake.

First year: 100% replacement of parts cost
Second year: 67% replacement of parts cost
Third year: 50% replacement of parts cost

THREE-YEAR WARRANTY EXCEPTIONS

Transaxle: In cases where there is an increase in the operational noise level, the warranty does not apply. (The increase in operational noise level usually occurs due to abusive and excessive strain on the scooter.)
Motor: If damage occurs to the motor commutator as a result of not replacing the motor brushes after heavy wear to the brushes. Motor brushes are wear items and are not warranted.
Motor brake: Three-year warranty for the electrical function of the motor brake. Brake pads are a wear item and will not be warranted.

ONE-YEAR LIMITED WARRANTY

For one (1) year from the date of purchase, Pride will repair or replace, at our option, to the original purchaser, free of charge, any part found upon examination by an authorized representative of Pride to be defective in material and/or workmanship.

The battery is warranted by the battery manufacturer. The battery is not warranted by Pride.

Warranty service can be performed by a provider authorized by Pride or by Pride. Do not return faulty parts to Pride without prior consent. All transportation costs and shipping damage incurred while submitting parts for repair or replacement are the responsibility of the original purchaser.

WARRANTY EXCLUSIONS

- ABS plastic shrouds and footrest covers (wear items and not warranted).
- Batteries (the battery manufacturer provides a six-month limited warranty).
- Tires and tire tubes (wear items and not warranted).
- Upholstery and seating (wear items and not warranted).
- Repairs and/or modifications made to any part of the PMV without specific and prior consent from Pride.
- Circumstances beyond the control of Pride.
- Damage caused by:
  - ✓ Battery fluid spillage or leakage
  - ✓ Abuse, misuse, accident, or negligence
  - ✓ Improper operation, maintenance, or storage
  - ✓ Commercial use or use other than normal
- Labor, service calls, shipping, and other charges incurred for repair of the product.

XIII. WARRANTY

There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from the date of original purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion of limitation of incidental or consequential damages. So, the above limitation or exclusion may not apply to you.

The warranty gives you specific rights, and you may also have other rights, which vary from state to state.

Please fill out the warranty card and mail it to Pride. Doing so aids Pride in providing you with the best possible technical and customer service.

NOTES

N O T E S

Pride
Mobility Products Corp.

182 Susquehanna Ave.
Exeter, PA 18643
1-800-800-8586

www.pridemobility.com

INFMANU3282

INFMANU3282/RevA/April2000